

# A Scoping Review of the Research on the Teaching Models of Online International Chinese Language Teaching

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## Abstract

The realm of online international Chinese language teaching is undergoing significant transformations propelled by the internet and the pandemic. The digital teaching is the way forward for online international Chinese language teaching. There are significant differences between online international Chinese language teaching and traditional Chinese language teaching. To improve online teaching activities and guide future research, this growing field aims to analyze Chinese international online education research. Specifically, the goal is to develop a sustainable teaching model. By utilizing Preferred Reporting Items for Systematic Review and Meta-Analysis Protocol (PRISMA-P), the authors analyzed 27 articles proposing a viable teaching model. The review identifies six models of online Chinese language teaching: flipped classroom, APP software, open online platform, online interaction, blended learning, and ChatGPT. The blended learning model is considered the most effective but still faces limitations such as technical issues, demanding teachers, lack of motivation, limited face-to-face interaction, and limited assessment options. Scholars suggest solutions including technical support, teacher training, motivation, improving face-to-face interaction, and using multiple assessment methods. Overall, the blended teaching model has the potential to advance online international Chinese language teaching in the future.

**Keywords:** Online International Chinese Language Teaching, Online International Chinese language teaching models, the blended teaching model

## 1. Introduction

In recent years, the education industry has seen significant changes due to the high-speed expansion of the network (Beech & Anseel, 2020). The COVID-19 pandemic has forced the adoption of online schooling, leading to a surge in its development (Nicola et al., 2020). This has also impacted the field of international Chinese language teaching, which has now moved from real classrooms to virtual cyberspace (Lerman & Sen, 2020). However, traditional Chinese language teaching is being challenged by online teaching (Guo, 2020).

The concept of traditional Chinese language teaching is distinct from online international Chinese language teaching. The apparent distinction is that traditional Chinese language teaching occurs in a real classroom setting, whereas online international Chinese language teaching is conducted online (Guo, 2020). Online international Chinese language teaching has several advantages over traditional Chinese language teaching, such as eliminating time and space gaps between different countries and utilizing students' fragmented time (Fauzi, 2022). However, due to the unique nature of language teaching, online international Chinese language teaching also has many disadvantages. For instance, teachers' limited information literacy makes it difficult to adapt to comprehensive online teaching, and current teaching platforms are of varying quality and lack a complete and unified teaching system (Yang et al., 2020).

The disparities between traditional Chinese language teaching and Online International Chinese language teaching are apparent. Each approach has its advantages and disadvantages (Money & Dean, 2019). Are there more suitable teaching models that future researchers can utilize to investigate online international Chinese language teaching? To comprehensively study the "teaching model" topic, this review uses the PRISMA-P to analyze research published in CNKI from 2012 to 2023. The goal of this review is to identify a viable teaching model for future researchers to consider.

This review has identified three reviews of online international Chinese language teaching that are currently available (i.e., Gao, 2021; Xu & Shi, 2013; Ma et al., 2021). Gao (2021) systematically reviewed "teachers" and

“teaching methods”, Xu and Shi (2013) explored “teaching materials” and “teaching methods”, and Ma et al. (2021) detailed “teaching materials”. However, none of these reviews specifically address the topic of “teaching models” as this study does. This study focuses on other critical aspects of teaching models, which are outlined in Table 1.

Table 1. The comparison between the previous and this review

| N. | study             | Teachers | Teaching Materials | Teaching Methods | Teaching Model |
|----|-------------------|----------|--------------------|------------------|----------------|
| 1  | (Gao, 2021)       | √        | X                  | √                | X              |
| 2  | (Xu & Shi, 2013)  | X        | √                  | √                | X              |
| 3  | (Ma et al., 2021) | X        | √                  | X                | X              |
| 4  | This review       | X        | X                  | X                | √              |

## 2. Literature Review

Online teaching, which takes place in the virtual environment of the internet, has become increasingly popular in recent times (Wang & Ondago, 2021). Its integration into the teaching of Chinese language can be traced back to 1985, during the first International Forum on Chinese Language Teaching (Wang & Li, 2022). At that time, computer-assisted teaching was the main focus of research, but the investigation was limited in depth and breadth (Zhang, 2022).

However, since the outbreak of the pandemic in 2020, online teaching has almost replaced traditional classroom teaching (Zhang, 2020). Teachers are improving their digital skills rapidly, and many platforms, apps, and other online teaching resources are flourishing (Yang, 2019). However, there are still challenges to be addressed, such as limited digital teaching skills among teachers, online blended teaching resources, and limited language interaction in live and recorded teaching formats (Wu, 2022). This review focuses on finding effective teaching models in the field of international Chinese language teaching, considering both the advantages and disadvantages of online and traditional teaching methods.

Research on the traditional Chinese language teaching model primarily centers around three aspects. Firstly, the overall teaching model is examined, followed by the teaching model that emphasizes pedagogy. Lastly, the teaching model that highlights the text’s characteristics is also studied (Ciftci & Karaman, 2019). This study will specifically focus on the key findings of a pedagogical model of teaching that concentrates on pedagogy. The traditional Chinese teaching model primarily utilizes the direct method and task method as its main pedagogies (Chen & Chung, 2011).

Using the direct method is an important aspect of teaching advanced Chinese language (Hsu & Lin, 2020). This method prioritizes comprehensive training over sub-skill training and involves classroom drills and discussions, as well as practicing with both large and small groups. The aim is to implement the principles of “student-centered, teacher-led” and “intensive teaching and practice”, providing more opportunities for students to learn and practice through lectures (Hsu & Lin, 2020). With the emergence of the task approach, the classroom teaching model is further upgraded. The “Statute-Open Task Teaching Model”, categorizes tasks effectively, highlighting the significance of communication skills in task-based teaching, and also utilizing the extracurricular environment to its fullest potential (Chen et al., 2022). To integrate the essential features and principles of the task-based teaching method into international Chinese language teaching, International Chinese language teaching, proposed a task-based language teaching model suitable for international Chinese language teaching. The task-based language teaching model is proposed to be suitable for international Chinese language teaching (Qiu et al., 2022).

Through literature review, it was discovered that online Chinese language teaching models go beyond the three commonly known types. To address this point, the research question was proposed (RQ1): What teaching models are utilized in online international Chinese language teaching?

Before the advent of online teaching, Chinese language instruction was limited in its exposure to international models. However, with the emergence of online teaching, new possibilities have arisen for flipped classrooms, APP software, online platforms, interaction, blended, and ChatGPT models. In this paper, various teaching models are examined and compared in order to determine more effective approach for teaching Chinese language online on an international scale. (RQ2): Which online international Chinese language teaching model is more effective? One of the key benefits of online teaching is that it allows for a more personalized and flexible learning experience, which can be tailored to meet the needs and preferences of individual students.

According to the authors, previous research on online international Chinese language teaching has only focused on finding an optimal solution (Gao, 2021; Ma et al., 2021; Xu & Shi, 2013). This paper aims to address this gap

by exploring the limitations of the optimal solution and proposing a better model. Thus, the authors expose (RQ3): What are the limitations of this more effective teaching model?

Recognizing the limitations of the aforementioned teaching model is crucial for further enhancing the online Chinese language learning experience. In light of these limitations, several suggestions have been put forward to improve the efficacy and efficiency of the teaching model. Thus, the authors proposed this question (RQ4): What suggestions have made to improve this more effective teaching model?

### **3. Research Method**

This review article followed the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocol (PRISMA-P) guidelines and traditional literature research methods. In this review, the authors analyze the primary literature in the CNKI database by posing two specific inquiries. The literature is then thoroughly screened using the PRISMA-P research method, which involves implementing specific exclusion criteria. The authors further refine the two questions using traditional research methods such as article publication time and research method. Ultimately, the authors offer a comprehensive analysis and answers to the initial inquiries. Figure 1 contains the PRISMA-P checklists used in this study.

#### *3.1 Literature Search*

The aim of this review is to identify relevant articles from CSSCI and Peking University core journals included in CNKI journals online between 2012 and 2023. The subjects focused on “*华文 and 教学*”, “*汉语 and 教学*”, and “*中文 and 教学*”. Consequently, the literature search generated a total of 4574 results, which were imported into EndNote to remove duplicate studies.

#### *3.2 Inclusion and Exclusion Criteria*

To carefully select relevant studies, a two-round exclusion process was followed. Firstly, studies that did not focus on Online Chinese as a second language teaching, minority languages, or Chinese language promotion and communication were excluded. After these scoping procedures, articles were rechecked, and those that lacked information or had unclear results were excluded.

After eliminating 924 duplicates, the authors obtained 3650 initial articles, out of which we manually screened 2772 articles by reading abstracts and keywords to exclude those not related to online teaching Chinese as a second language. We also identified 607 articles discussing minority language learning and Chinese Language Promotion and Communication, which were outside our exclusion range. We then excluded 162 conference papers and book review papers to get 109 primary screening papers. By reading these 109 articles and eliminating 49 articles that did not provide valid information and 33 articles with unclear conclusions, we were left with 27 papers (Appendix A) that are the subject of this paper. Figure 1 illustrates the entire process.

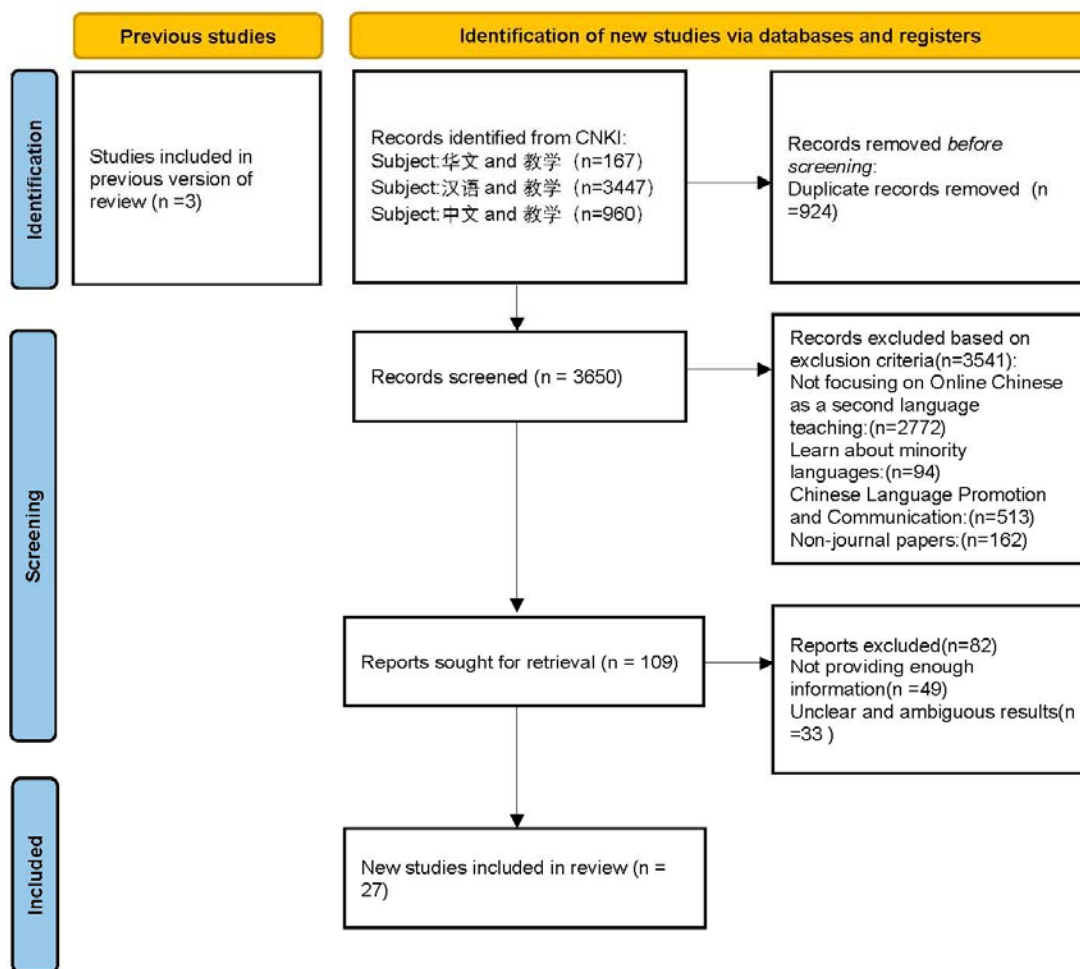


Figure 1. A flow-diagram of literature selection

## 4. Result

### 4.1 RQ1 What Teaching Models Are Utilized in Online International Chinese Language Teaching?

#### 4.1.1 The Flipped Classroom Teaching Model

The flipped classroom first started in the United States, and then with the rapid development of computer technology and the continuous adoption of student-centered teaching ideology in China, the flipped classroom has gradually become the focus of discussion among researchers, and the heat of its research developed rapidly from 2012 to 2015, but began to decline year by year in 2016 (Guo, 2022).

While there is a substantial amount of research on the flipped classroom teaching model in contemporary academic communities, there is still a scarcity of studies regarding its application in teaching international Chinese language.

This review found that only three of the above screened 27 articles explored the flipped classroom teaching model, one published in 2015 argued the feasibility of the flipped classroom applied to the practice of teaching Chinese as a foreign language (Sun et al., 2015), one published in 2019 discussed the exploration of a new model of flipped classroom online international Chinese language teaching (Shen, 2019), and one published in 2023 attempted to construct an evaluation model for the flipped classroom (Xu & Li, 2023).

After conducting research, Sun, Meng and Wen (2015) found that the flipped classroom teaching model is suitable for teaching Chinese as a foreign language. However, there are still some challenges. For instance, the success of the flipped classroom depends on students being proactive in their learning before class. If they are not, it can hinder the effectiveness of the in-class learning experience. Additionally, the cost of preparing for a flipped classroom is high, which can be challenging for teachers.

In his article, Shen (2019) proposed the exploration of “three steps and ten links” as a flipped classroom teaching model, narrowing down his research background to business Chinese. Shen found that this new flipped classroom teaching model is not only conducive to the internalization and enhancement of students’ knowledge, but also to the enhancement of student’s ability.

Furthermore, in 2023, Xu (2023) attempted to develop the flipped classroom evaluation model and put out the online international Chinese language teaching evaluation index. This proposed evaluation index enhances the flipped classroom teaching model.

But unfortunately, after the research in these papers, this new teaching model only further deepens the advantages of the flipped classroom, i.e., the absorption and accumulation of knowledge, but the disadvantages of this model, which are the requirements for students and teachers, have not been improved.

#### 4.1.2 The Model for Teaching Online Through the Use of APP Software

After reviewing 27 articles, it was discovered that only one article discussed APP-assisted instructional models. This indicates that there is still much to explore in this area. In 2015, Zou (2015) proposed an international Chinese language teaching model that utilized WeChat for pre- and post-class interactions. This model effectively extends classroom activities beyond the physical classroom, allowing students to use their fragmented time. The model is different from the traditional flipped classroom model because it increases student initiative and interest. However, it should be noted that this model is only meant to supplement the basic teaching mode and cannot replace it entirely.

#### 4.1.3 The Teaching Model That Utilizes an Open Online Platform

An open online teaching platform offers free or low-cost access to courses and educational materials to anyone with an internet connection, regardless of their location or educational level (Mishra et al., 2020). According to research, this model is primarily used for MOOC platform research and exploring emerging models, with four out of 27 papers focusing on this model. The studies have mainly concentrated on investigating MOOCs on open online platforms, with three out of the four papers collected focusing on the years 2014–2016.

In 2014, the MOOC model introduced “catechism” into international Chinese language teaching, and Lei (2014) has fine-tuned this teaching model for the Confucius Institutes. With the further integration of MOOC courses and international Chinese language teaching, many scholars have gained new insights into this model.

Liu (2015) suggests that this model is beneficial in discovering potential Chinese language learners, enhancing student motivation, utilizing students’ fragmented time, and enriching learning pathways. Wang and Pei (2016) have found that the MOOC course not only improves student knowledge absorption but also enhances the professional development of teachers. Unfortunately, the interactivity of MOOC courses is currently limited due to technical limitations and other issues. Teachers are unable to interact with students in a timely manner, and there are multiple courses that make it difficult for students to judge which is best for them. As a result, the completion rate of students is low. Additionally, there is a lack of teaching supervision system, making it difficult to assess the learning effect of students.

Many scholars now acknowledge that online teaching platforms, including MOOCs, can enhance personalized learning. However, the model cannot be implemented globally due to certain limitations. To address this issue, Li, Zhou, Zhang, Song, and Zhao (2016) have collaborated to develop a tele-expertise system for tele-Chinese micro-courses. This new addition to the online teaching platform offers more personalized education and is gaining popularity. However, challenges such as teaching interaction, supervision, and evaluation remain unresolved.

#### 4.1.4 The Online Interaction Model

Interactive teaching is a student-centered approach to language education. The teacher directs and facilitates communication among students, with the goal of enhancing their language skills. This teaching approach differs from the approach that places more focus on using apps. The primary goal of this teaching methodology is to enhance online learning interactions between teachers and student (Liu, 2013). This model has been widely studied from 2013 to 2016, and this review will summarize the three findings in chronological order.

This new online interactive model has been developed to teach Chinese language. This program firstly emphasizes oral instruction, as interactivity is crucial for improving speaking skills. The interactive teaching model complements traditional oral teaching, providing more opportunities for classroom oral exchanges without time constraints. This model improves the quality of classroom teaching and reduces learners’ anxiety during face-to-face interactions with teachers. However, this model is only available as a complementary resource outside the traditional classroom setting (Liu, 2013).

In 2014, Bai (2014) explored the process design of the international Chinese online interactive teaching model and proposed a suitable online interactive teaching model for adults from four aspects, namely, phonetics, Chinese characters, vocabulary, and grammar, respectively, which expanded and refined the scope of the study, but the teaching model did not get rid of the identity of the traditional classroom assistance and limited the research object to the adults who have better self-control.

Zheng, Lu and Lian (2016) conducted research on the real-time interactive teaching model for the “China-US Real-Time Interactive Language Laboratory.” According to the data collected from questionnaires and interviews, it is feasible to learn Chinese online through interaction. However, there are still issues that need to be addressed, such as the time difference between regions, network quality, lack of face-to-face interaction between students, and anxiety during the learning process.

#### 4.1.5 The Blended Teaching Model

Blended teaching, also known as hybrid teaching, is a teaching approach that merges traditional classroom instruction with digital or online teaching techniques. The aim is to leverage the advantages of both face-to-face teaching and technology to provide students with a more flexible and personalized learning experience. This model is a novel approach that combines the flipped classroom teaching method and relies on scientific advancements and technology (Pape, 2010).

Out of the 27 papers examined, this review discovered that 13 of them primarily delved into the blended teaching model. Furthermore, the unique circumstances of the epidemic have created a significant contrast between research on the blended teaching model before and after the outbreak. As a result, this review will utilize the epidemic as a primary point of reference and evaluate the blended teaching model accordingly.

Before the pandemic, the focus on the blended teaching model was primarily on its conceptualization, with studies lacking empirical research data and objects. However, after the pandemic, the focus shifted towards practical research of the model proposed pre-pandemic.

Back in 2014, Zheng (2014) proposed a blended teaching model to improve the teaching of Chinese language. This model involves conducting traditional classroom teaching in-class while emphasizing personalized independent after-school supplemental instruction through online teaching. However, despite being innovative, there is a lack of specific implementation steps for each component. Shen (2015) conducted research on the blended model of teaching business Chinese. Through practical research, it was found that this model is effective. Shen’s research is more detailed and precise than Zheng’s, and draws a positive conclusion. However, there is still a need for further exploration and development of the blended model in teaching International Chinese.

In 2016, Yuan (2016) conducted research on blended teaching models, focusing on four sub-models: station rotational model, lab rotational model, flipped classroom model, and individual rotational model. The study was conducted in Chinese language classes, and Yuan highlighted the requirements for both teachers and learners in the blended model. Another researcher, Li (2016), proposed two blended teaching models based on the flipped classroom model, utilizing APP software and micro-classes. One model combines the flipped classroom with MOOC and SPOC, while the other uses micro-classes as part of the Blending Learning approach. Wu, Zhang, and Ma (2018) explored the construction of an international Chinese language teaching experimental platform for “Internet+” based on the blended model, including flipped classroom and live broadcasting, cross-platform applications, and fragmented self-help learning. Although the blended teaching model has been discussed, it has not yet been put into practical application.

Since the outbreak of the pandemic in 2020, there has been increased discussion about the blended teaching model. Traditionally, the blended model involves a mix of online and offline teaching, but prior to the pandemic there had been limited experimentation or in-depth discussion about a purely online blended model. Following the pandemic, many have explored various conditions of online recording and online live blended models, as well as compared them to purely live or purely recorded models. It has been found that the blended model is superior to the aforementioned pure models (Guan & Jiang, 2021; Luo, 2021; Sun, 2021; Wang, 2020).

After the 2023 pandemic concluded, academics initiated investigations into whether blended teaching models could be effective. Gao and Peng (2023) deliberated on the creation of a MOOC platform associated with blended teaching model; Jiang (2023) investigated the suited application of blended teaching model in Korean Chinese language education, using Ulsan University as an illustration; Wen and Liu (2023) examined the instructional design of blended teaching model throughout the boundaries of Beijing Language and Culture University’s “International Chinese Language Wisdom Education Project”; Cai and Liu (2023) also attempted to develop the “three sections and nine steps” teaching model in combination with the “International Chinese Wisdom Education

Project.” These are all new investigations into the blended learning model that will require additional investigation and practical application in the future.

#### 4.1.6 The Teaching Model with ChatGPT

OpenAI created the artificial intelligence chatbot application ChatGPT, which launched in November 2022. A language model trained to generate text is called ChatGPT. Reinforcement Learning with Human Feedback, a technique that guides the model toward desired behavior through preference comparisons and human examples, was employed to optimize ChatGPT for communication. With its generative AI capabilities of creation, pre-training, and huge models, ChatGPT presents both new possibilities and difficulties for Chinese language teaching (Li et al., 2023).

Since 2023, three articles have been published that primarily focus on the online international Chinese teaching model and the application of ChatGPT. Jin (2023) introduced the concept of human-computer interaction achieved by ChatGPT. It explored the potential for collaborative teaching between AI and Chinese teachers, and emphasized the comprehensive role of AI in international Chinese education. Cai (2023) examined ChatGPT from the perspectives of interaction method and activity theory. It discussed the language acquisition conditions facilitated by ChatGPT and analyzed the relationship between the components of Chinese learning activities involved in ChatGPT. Ma and Liang (2023) focused on the approach to handling the digital transformation of international Chinese language education and the flexible use of ChatGPT in international Chinese language teaching model. They discussed the necessary considerations at the levels of motivation, objectives, and practice in order to effectively incorporate ChatGPT into the teaching process.

The aforementioned three articles have examined the viability of incorporating ChatGPT into online international Chinese language teaching models. However, they did not provide specific recommendations regarding teaching models and implementation methods. We anticipate that future researchers will undertake in-depth investigations into the application of ChatGPT in online international Chinese language teaching models. Such research endeavors will significantly enhance our understanding of the potential benefits and challenges associated with integrating ChatGPT into language education, and ultimately contribute to the advancement of online international Chinese language teaching practices.

Table 2. The international Chinese language teaching model

| Teaching Model  | No. of Included Studies | Study |
|---|-------------------------|-------|
| The flipped classroom teaching model                          | (Sun et al., 2015)      | 2015  |
|   | (Shen, 2019)            | 2019  |
|   | (Xu & Li, 2023)         | 2023  |
| The model for teaching online through the use of APP software | (Zou, 2015)             | 2015  |
| The teaching model that utilizes an open online platform      | (Lei, 2014)             | 2014  |
|   | (Liu, 2015)             | 2015  |
|   | (Wang & Pei, 2016)      | 2016  |
|   | (Li et al., 2016)       | 2016  |
| The online interaction model                                  | (Liu, 2013)             | 2013  |
|   | (Bai, 2014)             | 2014  |
|   | (Zheng et al., 2016)    | 2016  |
| The blended teaching model                                    | (Zheng, 2014)           | 2014  |
|   | (Shen, 2015)            | 2015  |
|   | (Yuan, 2016)            | 2016  |
|   | (Li, 2016)              | 2016  |
|   | (Wu et al., 2018)       | 2018  |
|   | (Wang, 2020)            | 2020  |
|   | (Sun, 2021)             | 2021  |
|   | (Guan & Jiang, 2021)    | 2021  |
|   | (Luo, 2021)             | 2021  |
|   | (Gao & Peng, 2023)      | 2023  |
|   | (Jiang, 2023)           | 2023  |
| (Wen & Liu, 2023)   | 2023                    |       |
| The teaching model with ChatGPT                               | (Cai & Liu, 2023)       | 2023  |
|   | (Jin, 2023)             | 2023  |
|   | (Cai, 2023)             | 2023  |
|   | (Ma & Liang, 2023)      | 2023  |

#### 4.2 RQ2 Which Online International Chinese Language Teaching Model Is More Effective?

There are various teaching models available, each with its own set of pros and cons. However, based on research findings and analysis of different models, the blended teaching model has emerged as the preferred choice for scholars. Through reviewing relevant literature, this study has identified several advantages of the blended teaching model over other models.

The blended teaching model is an improved version of various teaching methodologies such as the flipped classroom, modern technology utilization, and online interaction research. It combines the strengths of all these models and follows the student-centered teaching approach. The model also incorporates modern technology to enhance online interactive teaching.

There are two types of blended Chinese teaching models: online and offline blended, and purely online teaching model which is further divided into online live and online recording blended model. Each model has its own set of advantages which will be explained in detail below.

The blended teaching model, which combines online and offline methods, is highly valued for its effectiveness in language teaching. Classroom teaching is particularly important for interactive learning, while online teaching serves as a useful supplement for storing and utilizing Chinese learning materials, using learning platforms, and customizing teaching for students with diverse language backgrounds and proficiency levels. Additionally, incorporating online teaching can help to streamline learning management and make it more efficient (Li, 2016; Shen, 2015; Wu et al., 2018; Yuan, 2016; Zheng, 2014).

The pure online blended teaching model combines online recording and live broadcasting. While this model has numerous benefits such as saving time and space, many users have reported issues with interactive teaching. Human-computer interaction lacks the emotional connection and knowledge exchange that human-human interaction provides. Furthermore, online human-human interaction is limited by network conditions and time zones. As the pandemic eventually subsides, a blended model of online and offline teaching will be the future of international Chinese language instruction (Cai & Liu, 2023; Gao & Peng, 2023; Guan & Jiang, 2021; Jiang, 2023; Luo, 2021; Sun, 2021; Wang, 2020; Wen & Liu, 2023).



Overall, the blended teaching model, which combines traditional face-to-face teaching with online or digital learning, can bring several benefits to teaching Chinese language. Firstly, it offers flexibility for students to learn at their own pace and convenience. They can access Chinese course materials and complete assignments online, which is especially helpful for those with other commitments or living in remote areas. Secondly, blended teaching can provide a more personalized Chinese teaching experience. Online models can be tailored to cater to individual needs and interests, while face-to-face classes can offer personalized feedback and interaction with the teacher. Thirdly, blended teaching equips Chinese teachers with tools and resources to better support their students. Online platforms allow teachers to monitor student progress, provide real-time feedback, and facilitate communication outside of class. Fourthly, the blended teaching model enhances interactive engagement. It allows students to engage in repeated human-computer interactions during the after-school time, which broadens the avenues of language interaction in the traditional classroom. Lastly, the blended teaching model makes the Chinese teaching evaluation more scientific. With the support of the teaching platform, both teacher assessment and the quality of student learning can be quantified.

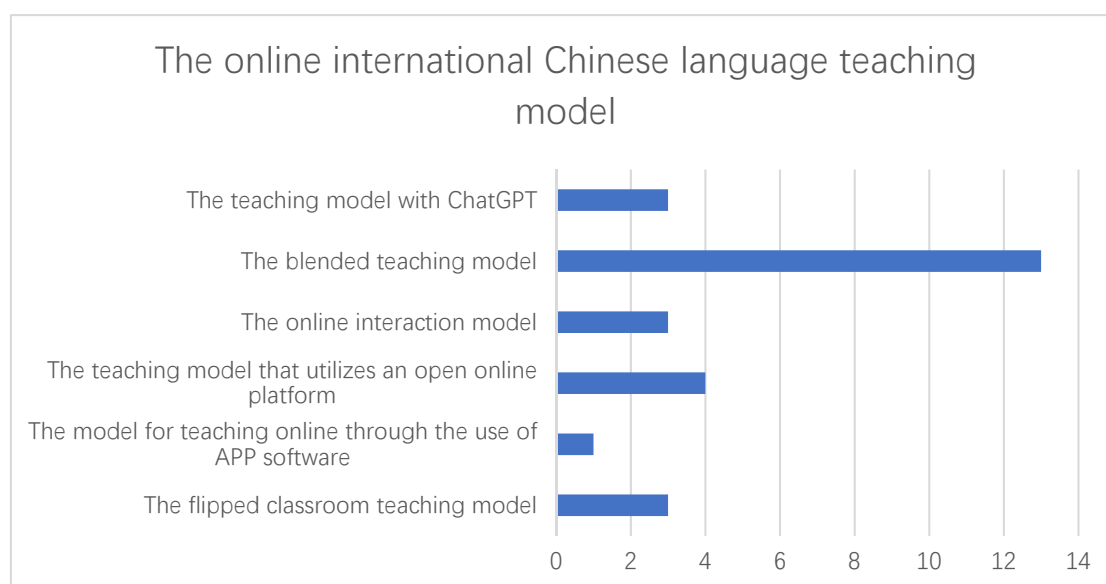


Figure 2. The online international Chinese language teaching model research number

#### 4.3 RQ3 What Are the Limitations of This More Effective Teaching Model?

The blended teaching model has some drawbacks despite their advantages, as current research on them is not comprehensive. Firstly, while the blended teaching model can reduce the time and cost burdens for international students, technical issues such as internet speed, time differences, and limited educational resources in different countries make it challenging to implement. Secondly, although the blended teaching model allows for personalized learning, teachers face numerous obstacles in mastering the platforms and handling various difficulties in student learning. Thirdly, while online teaching platforms offer more resources, motivating students after class remains a significant challenge. Fourthly, while the blended teaching model facilitates human-computer interactions, it limits classroom teacher-student and student-student interactions. Lastly, although the blended teaching model enables a quantitative and scientific evaluation system, it may restrict the types of assessments teachers can use, making it difficult to measure students' language proficiency accurately (Li, 2016; Shen, 2015; Wu et al., 2018; Yuan, 2016; Zheng, 2014).

#### 4.4 RQ4 What Suggestions Have Made to Improve This More Effective Teaching Model?

To address the issues mentioned above, several suggestions have been proposed by researchers. Firstly, it is recommended to offer more technical support to underdeveloped regions. The Belt and Road Initiative, proposed by General Secretary Xi Jinping, has led to an increasing number of people in developing countries showing interest in learning the Chinese language. Therefore, initiatives like the African Virtual University and the network of Confucius Institutes platforms can be established to address the problem of network technology. Secondly, schools can enhance teacher quality by developing a consistent curriculum and providing training to ensure that

teachers deliver instruction that aligns with the curriculum. Teachers can also use a variety of tools, such as learning management systems and online collaboration platforms, to provide consistent instruction and support to students. Thirdly, teachers should cultivate students' motivation by giving timely and accurate responses, such as attention in the classroom or correcting homework after class. Fourthly, teachers can organize in-person meetings or synchronous online sessions to provide more opportunities for students to practice their speaking and listening skills with their peers and teacher after school. This can help build a sense of community and boost motivation among students. Lastly, it is recommended to incorporate in-person meetings or synchronous online sessions to provide more opportunities for students to practice their speaking and listening skills with their teacher and peers after school (Li, 2016; Shen, 2015; Wu et al., 2018; Yuan, 2016; Zheng, 2014).

Table 3. The advantages, disadvantages, and suggestions of the blending teaching model for teaching Chinese language

| The advantages, disadvantages and suggestions of the blending teaching model for teaching Chinese language |                                  |   |
|--|----------------------------------|---|
| Advantages   | Disadvantages                    | Suggestions                                   |
| Flexibility  | Technical issues                 | Provide technical support                     |
| Personalized teaching  | Excessively demanding teachers   | Improve teacher quality                       |
| Multimedia resources   | Lack of motivation               | Foster motivation                             |
| Improved human-computer interactions   | Limited Face-to-Face Interaction | Improve Face-to-Face interaction after-school |
| Scientific teaching assessment system  | Limited assessment options       | Use Multiple Assessment Methods               |

## 5. Discussion

In this review, previous studies on the international Chinese language teaching model were analyzed.

**RQ1** aims to explore the various teaching models used in online Chinese language teaching. The findings reveal six distinct models: the flipped classroom, APP-assisted, open online platform, online interaction, blended teaching and ChatGPT models. Each model offers its own set of advantages and challenges. The flipped classroom model requires active engagement and preparation from students and may incur higher costs for teachers (Shen, 2019; Sun et al., 2015; Xu & Li, 2023). The APP-assisted model serves as a supplement to traditional teaching methods, fostering student initiative and interest (Zou, 2015). The open online platform model provides free or affordable access to courses and educational resources but lacks interactivity and a comprehensive teaching supervision system (Lei, 2014; Li et al., 2016; Liu, 2015; Wang & Pei, 2016). The online interaction model emphasizes oral instruction and complements traditional face-to-face teaching, yet faces obstacles related to time differences, network quality, and the absence of in-person interaction (Bai, 2014; Liu, 2013; Zheng et al., 2016). The blended teaching model integrates conventional classroom instruction with digital or online teaching techniques, delivering a flexible and personalized learning experience (Cai & Liu, 2023; Gao & Peng, 2023; Guan & Jiang, 2021; Jiang, 2023; Li, 2016; Luo, 2021; Shen, 2015; Sun, 2021; Wang, 2020; Wen & Liu, 2023; Wu et al., 2018; Yuan, 2016; Zheng, 2014). Lastly, the teaching model with ChatGPT explored its potential for collaborative teaching, language acquisition conditions, and the considerations of motivation, objectives, and practice (Cai, 2023; Jin, 2023; Ma & Liang, 2023). These findings primarily examined the benefits of various teaching models. This emphasis on advantages is likely due to the current research's focus on presenting the models rather than delving into the practical aspects of teaching, leading to a bias towards highlighting the advantages. Further research is necessary to ascertain which models are capable of addressing the challenges associated with implementing online language education (Ma et al., 2023).

**RQ2** aims to explore the more effective online model of teaching Chinese as a foreign language. The blended teaching model in Chinese language instruction combines online and offline methods, offering flexibility, personalization, and improves support for teachers and students. It integrates interactive classroom learning with online resources, allowing students to learn at their own pace and access course materials conveniently (Cai & Liu, 2023; Gao & Peng, 2023; Guan & Jiang, 2021; Jiang, 2023; Li, 2016; Luo, 2021; Shen, 2015; Sun, 2021; Wang, 2020; Wen & Liu, 2023; Wu et al., 2018; Yuan, 2016; Zheng, 2014). Given these advantages, the blended learning model is increasingly recognized as the preferred choice for Chinese language instruction in the future. By combining the strengths of traditional classroom teaching and online learning, it offers a balanced and effective approach that maximizes the benefits of both modalities (Li et al., 2022). However, it is important to note that further research, including a larger number of samples and extensive practice, is still needed to obtain more specific and conclusive results. This ongoing investigation will provide valuable insights into the optimal implementation and customization of the blended learning model for Chinese language education.

**RQ3** was designed to explore the limitations of the blended learning model of teaching and learning. The blended teaching model, despite its advantages, has some drawbacks. Technical issues, such as internet speed and limited educational resources in different countries, can make implementation challenging (Cai & Liu, 2023; Gao & Peng, 2023; Guan & Jiang, 2021; Jiang, 2023; Li, 2016; Luo, 2021; Shen, 2015; Sun, 2021; Wang, 2020; Wen & Liu, 2023; Wu et al., 2018; Yuan, 2016; Zheng, 2014). Teachers may face difficulties in mastering online platforms, addressing individual student needs, motivating students outside of class, and limited interpersonal interactions. The emphasis on quantitative evaluation may also restrict assessment options. Addressing these challenges is crucial for successful implementation of online teaching. The challenges stemming from online teaching itself include technical issues, such as internet connectivity, bandwidth limitations, and access to reliable digital tools. These factors can impact the quality of the learning experience and hinder effective communication between teachers and students. Additionally, the absence of face-to-face interaction can create a sense of detachment and reduce the opportunities for immediate feedback and personalized guidance. Overcoming these challenges requires a focus on improving technological infrastructure, providing technical support to both teachers and students, and ensuring access to high-speed internet and appropriate digital resources. By recognizing the challenges specific to online teaching and the interactive nature of language instruction, educators and institutions can develop targeted solutions (Li et al., 2021). Through a combination of technological advancements, innovative instructional strategies, and continuous professional development, it is possible to bridge the gap between traditional face-to-face language teaching and the online learning environment. This approach will enable educators to create effective and engaging online language learning experiences while addressing the inherent challenges associated with both online teaching and language instruction.

**RQ4** is designed to explore current scholarly solutions to the shortcomings of the blended learning model. To effectively implement blended teaching models, a number of measures are recommended by researchers. Firstly, it is suggested that technical support be extended to underdeveloped regions through initiatives such as the African Virtual University and the Confucius Institutes platforms. Secondly, enhancing teacher quality can be achieved by designing a coherent curriculum and offering regular professional development training. Moreover, the utilization of learning management systems and online collaboration platforms is advocated to ensure consistent instructional delivery. In order to foster student motivation, it is crucial to provide timely and accurate feedback, as well as create a conducive classroom environment. Finally, the organization of in-person or synchronous online sessions can afford greater opportunities for students to engage in peer and teacher interactions, thereby honing their speaking and listening skills. By implementing these suggestions, the challenges of the blended teaching model can be effectively addressed in Chinese language instruction (Li et al., 2023). Implementing these suggested measures can effectively address the challenges associated with the blended teaching model in Chinese language instruction. However, it is important to note that there is a lack of sufficient samples and practice space for international Chinese language teaching, as mentioned in the previous article. Therefore, it is anticipated that more scholars will put these methods into practice to support the development of international Chinese language education. Through ongoing research, implementation, and evaluation, the effectiveness of these solutions can be further validated and refined, ultimately contributing to the advancement of blended learning in Chinese language instruction on a global scale.

## 6. Conclusion

### 6.1 Major Findings

In the wake of the 2020 epidemic, the field of international Chinese language teaching is experiencing a significant shift. Scholars are increasingly focused on the impact of unforeseen events on teaching international Chinese language and are exploring the integration of technology with traditional teaching methods. The prevailing consensus among scholars is that the blended teaching model, which combines traditional and online teaching methods, is the more effective approach. This teaching model provides flexibility and customization in education, expands access to traditional teaching resources, improves human-computer interaction, and establishes a scientific assessment system.

Despite the benefits of the blended teaching model, there are still challenges to be addressed. These include limitations in technology, teacher literacy, student motivation, face-to-face interaction, and assessment options. To overcome these obstacles, scholars are working to provide more technical support, improve the quality of language teachers, encourage timely feedback, enhance interactive teaching, and use a variety of assessment methods.

While there are several teaching models being utilized in online international Chinese language teaching, there is still much to be explored and developed. The effectiveness of each model depends on factors such as student

engagement, teacher preparation, and technical capabilities. As technology continues to advance, it is likely that new teaching models will emerge, and it will be important for researchers and educators to continue to evaluate their effectiveness in meeting the needs of Chinese language learners.

### *6.2 Implications*

The literature review provides insights into various teaching models used in online international Chinese language teaching. It examines the benefits and drawbacks of each model and encourages further research to enhance their effectiveness. The blended teaching model proves to be the more effective, but its implementation must be deliberate and supported to cater to the specific needs of both learners and teachers. Incorporating the recommendations of researchers can boost the quality of online international Chinese language teaching, improving student learning outcomes.

It's essential to note that successful implementation of the blended teaching model requires a joint effort from schools, teachers, students, and technology companies. Teachers should have the necessary skills and resources to implement the model effectively, while students must be motivated and engaged in the learning process. Technology companies should develop user-friendly platforms that meet the specific needs and requirements of language learners, and schools should establish support systems to provide additional resources and support to learners. Collaborating together, these stakeholders can ensure that the blended teaching model is a sustainable and effective approach to teaching international Chinese language.

### *6.3 Limitations*

To summarize, although online international Chinese language teaching model have shown promise, there are still obstacles that need to be overcome in order to make them more effective. As outlined in this review, these obstacles include the changing role of teachers, the need for teacher training and support, students adapting to new learning methods, using resources effectively, selecting the right teaching platforms, improving interactive teaching methods, and creating effective evaluation systems.

It is crucial for everyone involved, including schools, teachers, students, and technology companies, to work together to address these challenges and improve the quality of online international Chinese language teaching. By taking the advice and recommendations of researchers, schools can enhance the effectiveness of these methods and provide students with an excellent learning experience. With further research and development, online international Chinese language teaching methods have the potential to transform language education and give students access to high-quality language instruction, irrespective of their location or other obstacles.

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No additional data are available.

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## Appendix A

## The quality assessment of included studies

| N. | Study                | Theoretical Framework | Research Instruments        | Research Question | Research Foci  | Quality Assessment |     |     |     |       |
|----|----------------------|-----------------------|-----------------------------|-------------------|--|--------------------|-----|-----|-----|-------|
|    |                      |                       |                             |                   |  | (a)                | (b) | (c) | (d) | Total |
| 1  | (Sun et al.)         | SCT                   | Comparative test            | Clear             | Whether the flipped classroom is suitable for International Chinese Language Teaching  | 2                  | 2   | 2   | 2   | 8     |
| 2  | (Shen, 2019)         | SCT                   | Students' essays            | Clear             | Explore the construction of the class teaching model of "three steps and ten processes" in the Flipped Classroom             | 2                  | 2   | 2   | 2   | 8     |
| 3  | (Xu & Li, 2023)      | SCT                   | Students' essays            | Clear             | Explore the construction of teaching evaluation model of the flipped classroom for International Chinese Language Education. | 2                  | 2   | 2   | 2   | 8     |
| 4  | (Zou, 2015)          | SCT                   | Students' essays            | Clear             | Explore the Interactive Teaching Model of International Chinese Language Teaching based on WeChat                            | 2                  | 2   | 2   | 2   | 8     |
| 5  | (Lei, 2014)          | SCT                   | Students' essays            | Clear             | Explore the MOOCs teaching model for the development of Confucius Institutes   | 2                  | 2   | 2   | 2   | 8     |
| 6  | (Liu, 2015)          | SCT                   | Students' essays            | Not available     | A review of the application of the MOOCs teaching model for the International Chinese Language Teaching                      | 2                  | 2   | 1   | 2   | 7     |
| 7  | (Wang & Pei, 2016)   | SCT                   | Case study                  | Clear             | The impact of MOOCs on International Chinese Language Teaching   | 2                  | 2   | 2   | 2   | 8     |
| 8  | (Li et al., 2016)    | SCT                   | Students' essays            | Clear             | Design the Distance Teaching Expert System for International Chinese Language Teaching                                       | 2                  | 2   | 2   | 2   | 8     |
| 9  | (Liu, 2013)          | SCT                   | Students' essays            | Clear             | Explore the model of self-training and evaluation of Networked Interactive Spoken Chinese                                    | 2                  | 2   | 2   | 2   | 8     |
| 10 | (Bai, 2014)          | SCT                   | Students' essays            | Clear             | Explore the Online Interactive Teaching Model of Chinese for Adult Foreigner   | 2                  | 2   | 2   | 2   | 8     |
| 11 | (Zheng et al., 2016) | SCT                   | Interview and Questionnaire | Clear             | Examine the Sino-US Chinese Cooperative Teaching Based on Real-time Video Interaction  | 2                  | 2   | 2   | 2   | 8     |
| 12 | (Zheng, 2014)        | SCT                   | Students' essays            | Not available     | Explore the Technological Consciousness and the Creation of Teaching Models for International Chinese Language Teaching      | 2                  | 2   | 1   | 2   | 7     |
| 13 | (Shen, 2015)         | SCT                   | Students' essays            | Clear             | Explore the Online Business Chinese Teaching Model   | 2                  | 2   | 2   | 2   | 8     |
| 14 | (Yuan, 2016)         | SCT                   | Students' essays            | Clear             | Design the Teaching Model for Comprehensive Chinese Course Based on Blended Learning   | 2                  | 2   | 2   | 2   | 8     |
| 15 | (Li, 2016)           | SCT                   | Students' essays            | Clear             | Explore the application of Distance Education Technology in International Chinese Language Teaching                          | 2                  | 2   | 2   | 2   | 8     |
| 16 | (Wu et al., 2018)    | SCT                   | Students' essays            | Not available     | Explore Online Teaching Laboratory Platform for Chinese Language Teaching  | 2                  | 2   | 1   | 2   | 7     |
| 17 | (Wang, 2020)         | SCT                   | Interview                   | Clear             | Examine the best Model of Online International Chinese Language Teaching   | 2                  | 2   | 2   | 2   | 8     |



|    |                      |     |                             |               |  |   |   |   |   |   |
|----|----------------------|-----|-----------------------------|---------------|--|---|---|---|---|---|
| 18 | (Sun, 2021)          | SCT | Interview and Questionnaire | Clear         | Explore the Online Teaching Model and Development Strategy of “Chinese Language + Vocational Skills”                   | 2 | 2 | 2 | 2 | 8 |
| 19 | (Guan & Jiang, 2021) | SCT | Tests                       | Clear         | Explore the Model of Online Effective Learning   | 2 | 2 | 2 | 2 | 8 |
| 20 | (Luo, 2021)          | SCT | Case study                  | Not available | Explore the future of Online International Chinese Language Teaching   | 2 | 2 | 1 | 2 | 7 |
| 21 | (Gao & Peng, 2023)   | SCT | Students’ essays            | Clear         | Explore the construction and development of cMOOC Model of educational informatization Platform in the Era of Big Data | 2 | 2 | 2 | 2 | 8 |
| 22 | (Jiang, 2023)        | SCT | Case study                  | Clear         | Explore the Localised Characteristics of Korean Chinese Teaching Models  | 2 | 2 | 2 | 2 | 8 |
| 23 | (Wen & Liu, 2023)    | SCT | Students’ essays            | Clear         | Explore teaching design of International Chinese Language Wisdom Education.  | 2 | 2 | 2 | 2 | 8 |
| 24 | (Cai & Liu, 2023)    | SCT | Students’ essays            | Clear         | Explore the construction of the “three stages and nine steps” teaching model   | 2 | 2 | 2 | 2 | 8 |
| 25 | (Jin, 2023)          | SCT | Students’ essays            | Clear         | Explore the application Strategies for the Deep Integration of ChatGPT with International Chinese Education.           | 2 | 2 | 2 | 2 | 8 |
| 26 | (Cai, 2023)          | SCT | Students’ essays            | Not available | Explore the Chinese language acquisition conditions provided by ChatGPT  | 2 | 2 | 1 | 2 | 7 |
| 27 | (Ma & Liang, 2023)   | SCT | Students’ essays            | Not available | Discuss the triple logic of digital transformation of International Chinese Language Education with ChatGPT            | 2 | 2 | 1 | 2 | 7 |

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